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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,843	02/06/2004	Neil Duncan Hunt	56055-0024	8524
29989	7590	07/26/2007	EXAMINER	
HICKMAN PALERMO TRUONG & BECKER, LLP			ZURITA, JAMES H	
2055 GATEWAY PLACE			ART UNIT	PAPER NUMBER
SUITE 550			3625	
SAN JOSE, CA 95110			MAIL DATE	DELIVERY MODE
			07/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/773,843	HUNT ET AL.	
	Examiner	Art Unit	
	James H. Zurita	3625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 04/25/2007.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-109 is/are pending in the application.
- 4a) Of the above claim(s) 1-6, 88-109 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 7-87 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Invention II, claims 7-87 in the reply filed on 25 April 2007 is acknowledged.

Applicant traverses the requirement on the ground(s) that examining all of the claims would not place a serious burden on the Examiner. In response to this argument, the Examiner respectfully notes that the Office requires that Examiners search claims without limiting searches to particular classes and subclasses. Thus, any search must include various types of searches, including textual searches and image searches of all classes and subclasses in each of multiple databases of US patents, PG-PUBS, foreign patents non-patent literature, the Internet and Internet archives.

Applicant also traverses on the grounds that all of the claims relate to estimating how a user would rate an item from a plurality of items, so it is difficult to see how they relate to divergent subject matter or have a separate status in the art. The Examiner respectfully disagrees and notes that the limitations provide the basis of the requirement.

Again, should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

The requirement is still deemed proper and is therefore made FINAL.

Claims 1-109 are pending, of which claims 1-6 and 88-109 are withdrawn from consideration as being directed to a non-elected invention.

Claims 7-87 will be examined. Claims 7, 34, 61 are independent. Claims 7-33 are method claims,

Priority

The instant application claims priority as a continuation-in-part of 09/884816, (Hastings, Hunt, Randolph, Ciancutti, Lanning), filed 18 June 2001, allowed on 29 May 2007. In turn, 09/884816 is a CIP of 09/561041 (Hastings, Randolph, Hunt), filed 28 April 2000, issued on 5 June 2003 as US 6,584,450.

Each of the above applications claim priority from provisional application 60/212193 (Ciancutti, Hastings, Hunt, Lanning), filed 16 June 2000 and from provisional application 60/244793 (Hastings, Hunt, Randolph), filed 31 October 2000.

Purcell and Shih first appear in the instant application, filed 6 February 2004.

The Examiner requests Applicant to identify where in the prior applications the features of the present invention are first disclosed. Since the prior applications also list different inventors than the present application (but with at least one common inventor), the examiner also requests the Applicant identify which inventor(s) contributed which features claimed in the present application that were also present in one or more prior application with different inventors.

Specification

The specification is objected to for minor informalities:

On page 16, paragraph 0054, line 3, should be changed to "...Referring also to Fig. 6, after starting in step 602..."

Appropriate correction is required.

External agents, claims 13, 40 and 67 are not mentioned in the description. The term appears to be used in relation to delivery channels, as in paragraph 0033. Prior art will be interpreted to read on the claims where prior art discloses notification means such as e-mail.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 7-87 are rejected under 35 U.S.C. 102(e) as being anticipated by Linden (US 6,266,649).

As per claim 7 Linden discloses a machine-implemented method for estimating how a particular user would rate a particular item from a plurality of items, the method comprising the machine-implemented steps of:

- **identifying [item(s)]** one or more items from the plurality of items that have ratings similar to the particular item; Col. 1, lines 42-56.
- **identifying [user(s)]** one or more other users that have given ratings to the one or more items that are substantially similar to ratings given by the particular user to the one or more items (Col. 8, lines 35-49); and
- **generating an estimation** of how the particular user would rate the particular item based upon ratings for the particular item given by the one or more other users. Col. 2, lines 33-44.

Identifying item(s)

As per claim 8, Linden discloses that identifying [item(s)] is performed off-line in advance of the other steps. Col. 2, lines 57-67.

As per claim 9, Linden discloses that identifying [item(s)] includes calculating a statistical correlation between the particular item and the other items from the plurality of items. Col. 13, lines 45-53.

As per claim 12, Linden discloses that identifying [item(s)] includes identifying whether the particular item and the one or more items have a number of co-raters greater than a specified fraction of a statistically expected number, given the number of ratings of each item counted separately. Col. 2, lines 57-65.

As per claim 13, Linden discloses that identifying [item(s)] is performed by one or more external agents. Col. 2, lines 45-56.

- As per claim 14***, Linden discloses that identifying [item(s)] includes consideration of one or more of
- a statistical correlation between the particular item and the one or more items, Col. 13, lines 47-53.
 - whether the particular item and the one or more items have at least a specified number of co-ratings,
 - whether the particular item and the one or more items have at least a specified fraction of co-ratings, and whether the particular item and the one or more items have at least a specified fraction of the statistically expected number of co-ratings.

...further comprising the step of

As per claim 10, Linden discloses a step of determining whether the particular item and each of the one or more items have at least a specified number of co-ratings. Col. 9, lines 34-53.

As per claim 11, Linden discloses a step of determining whether the particular item and one of the one or more items have at least a specified fraction of co-ratings between the particular item and the one of the one or more items divided by the number of ratings of either the particular item or the one of the one or more items. Col. 14, lines 43-63.

As per claim 15, Linden discloses a step of selecting the one or more other users from a plurality of other users based upon each of the one or more other users having at least a specified minimum number of ratings. Col. 14, lines 34-43.

As per claim 16, Linden discloses a step of selecting the one or more other users from a plurality of other users based upon each of the one or more other users having less than a specified maximum number of ratings. Col. 14, lines 48-67.

As per claim 17, Linden discloses a step of selecting the one or more other users from a plurality of other users based upon each of the one or more other users having an average rating within a specified range. Col. 16, lines 6-22.

As per claim 18, Linden discloses a step of selecting the one or more other users from a plurality of other users based upon each of the one or more other users having a rating distribution within a specified tolerance of a Normal distribution.

As per claim 19, Linden discloses a step of selecting the one or more other users from a plurality of other users based upon each of the one or more other users having a rating standard deviation within a specified range. Col. 15, lines 25-42.

Identifying other user(s)

As per claim 20, Linden discloses that identifying [user(s)] includes consideration of one or more of

- whether the one or more other users have at least a specified minimum number of co-ratings, (as in community of users, e.g., Col. 1, lines 42-56).

- whether the one or more other users have less than a specified maximum number of ratings,
- whether the one or more other users have an average rating within a specified range,
- whether the one or more other users have a rating distribution within a specified tolerance of a Normal distribution, and
- whether the one or more other users have a rating standard deviation within a specified range.

As per claim 21, Linden discloses that identifying [other user(s)] includes choosing the one or more other users for whom a statistical correlation with the particular user of co-ratings of the one or more items is greater than a specified threshold. Col. 2, lines 33-44; Col. 10, lines 37-46.

As per claim 22, Linden discloses that identifying [other user(s)] includes choosing the one or more other users for whom a vector cosine distance of co-ratings of the one or more items is smaller than a specified threshold. Col. 9, lines 53-62.

As per claim 23, Linden discloses that identifying [other user(s)] includes choosing the one or more other users who have co-rated a subset of the one or more items exactly the same as the particular user. Col. 5, lines 48-56.

As per claim 24, Linden discloses that identifying [other user(s)] includes choosing the one or more other users who have rated co-rated a subset of the one or more items within a specified threshold of the ratings by the particular user. Col. 9, lines 16-34.

As per claim 25, Linden discloses that identifying [other user(s)] includes consideration of one or more of

- whether the one or more users have a correlation of co-ratings of the one or more items greater than a specified threshold, Col. 12, lines 37-43.
- whether the one or more users have a vector cosine distance of co-ratings of the one or more items smaller than a specified threshold,
- whether the one or more users have co-rated a subset of the one or more items exactly the same, and
- whether the one or more users having co-rated a subset of the one or more items within a specified threshold of the ratings by the particular user.

As per claim 26, Linden discloses that identifying [other user(s)] includes choosing a specified number of other users most similar to the particular user. Col. 1, lines 42-56.

As per claim 27, Linden discloses that identifying [other user(s)] includes choosing other users whose similarity to the particular user is better than a specified threshold. Col. 2, lines 57-Col. 3, line 5.

As per claim 28, Linden discloses that identifying [other user(s)] includes choosing up to a specified number of other users most similar to the particular user, where all the chosen other users have similarity better than a specified threshold. Col. 3, lines 37-55.

...generating an estimation...

As per claim 29, Linden discloses that generating an estimation includes determining an average rating of the particular item by the one or more other users. Col. 12, lines 38-44.

As per claim 30, Linden discloses that generating an estimation includes determining an average rating of the particular item by the one or more other users.

As per claim 31, Linden discloses

- generating, for each of the one or more users, a separate estimation of how the particular user would rate the particular item based upon the rating for the particular item given by each of the one or more other users, and
- calculating a confidence metric based upon disparities between the separate estimations.

...plurality of items are...

As per claim 32, Linden discloses that the plurality of items is a plurality of movies, the one or more items is one or more movies and the particular item is a particular movie. Col. 1, lines 32-41.

As per claim 33, Linden discloses that the plurality of items is a plurality of music items, the one or more items is one or more music items and the particular item is a particular music item. Col. 2, lines 32-56.

Claims 34-60, directed to media, are rejected on the same basis as claims 7-33.

Claims 61-87, directed to an apparatus, are rejected on the same basis as claims 7-33.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James H. Zurita whose telephone number is 571-272-6766. The examiner can normally be reached on 8a-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Smith can be reached on 571-272-6763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Art Unit 3625
22 July 2007

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